

CURRENTLY PENDING CLAIMS

Please amend applicant's claims, without prejudice, to read as follows:

1 (previously presented). An article of manufacture for heat absorption, comprising:

(a) a flight data recorder that includes electronics that are sensitive to heat;
(b) hydroxide having a formula of $M_x(OH)_y$, wherein "M" is selected from the group consisting of lithium, sodium, potassium, magnesium, calcium, beryllium, aluminum and ammonium, and wherein "x" and "y" are integers, said hydroxide being provided in an amount sufficient to effect a level of heat absorption so as to protect the electronics within the flight data recorder from damage based upon exposure to a predetermined level of heat exposure;

(c) support means for supporting said hydroxide, said hydroxide being supportable in relation to the flight data recorder by said support means;

wherein said hydroxide effects said level of heat absorption at least in part based on an irreversible decomposition of said hydroxide; and

wherein irreversible decomposition of the hydroxide forms a thermal insulation oxide layer around the flight data recorder.

2 (original). An article of manufacture according to claim 1, wherein the means for supporting said hydroxide comprises a retaining matrix, packaging, encapsulation, microencapsulation, enclosure or structure.

3 (canceled).

4 (canceled).

5 (original). An article of manufacture according to claim 1, wherein the means for supporting said hydroxide is a closed container in which said hydroxide is located.

6 (original). An article of manufacture according to claim 5, wherein said hydroxide lines an inner wall of the closed container.

7 (previously presented). The article of manufacture according to claim 1, wherein said heat sensitive device is located within and spaced from said hydroxide.

8 (previously presented). An article of manufacture according to claim 1, wherein said hydroxide is adhered to a flexible substrate, said flexible substrate being of sufficient flexibility to conform to the size and shape of a heat sensitive device in thermal communication with said hydroxide.

9 (previously presented). An article of manufacture according to claim 1, wherein said hydroxide is a mixture of at least two of Lithium Hydroxide, Sodium Hydroxide, Potassium Hydroxide, Magnesium Hydroxide, Calcium Hydroxide, Beryllium Hydroxide, Aluminum Hydroxide, and Ammonium Hydroxide.

10 (original). An article of manufacture according to claim 1, further comprising at least one layer of insulation placed between said heat sensitive device and said support means.

11 (original). An article of manufacture according to claim 1, further comprising at least one layer of insulation placed between said support means and a source of heat.

12 (original). An article of manufacture according to claim 1, further comprising a hermetic seal surrounding said support means.

13 (original). An article of manufacture according to claim 12, wherein said hermetic seal includes a vent.

14 (original). An article of manufacture according to claim 1, wherein said hydroxide is Lithium Hydroxide.

15 (original). An article of manufacture according to claim 1, wherein said hydroxide is Sodium Hydroxide.

16 (original). An article of manufacture according to claim 1, wherein said hydroxide is Potassium Hydroxide.

17 (original). An article of manufacture according to claim 1, wherein said hydroxide is Magnesium Hydroxide.

18 (original). An article of manufacture according to claim 1, wherein said hydroxide is Calcium Hydroxide.

19 (original). An article of manufacture according to claim 1, wherein said hydroxide is Beryllium Hydroxide.

20 (previously presented). An article of manufacture according to claim 1, wherein said hydroxide is Aluminum Hydroxide having a formula of $\text{Al}(\text{OH})_3$.

21 (original). An article of manufacture according to claim 1, wherein said hydroxide is Ammonium Hydroxide.

22 (previously presented). An article of manufacture for heat absorption, comprising:

(a) a flight data recorder that includes electronics that are sensitive to heat;

(b) hydroxide having a formula of $\text{M}_x(\text{OH})_y$, wherein "M" is selected from the group consisting of lithium, sodium, potassium, magnesium, calcium, beryllium, aluminum and ammonium, and wherein "x" and "y" are integers, said hydroxide being provided in an amount sufficient to effect a level of heat absorption so as to protect the electronics within the flight data recorder from damage upon exposure to a predetermined level of heat exposure, said hydroxide being formed into an endothermic structure that is configured and dimensioned for heat absorption positioning with respect to the flight data recorder and is effective to absorb said level of heat at least in part based on an irreversible decomposition of said hydroxide;

wherein irreversible decomposition of the hydroxide forms a thermal insulation oxide layer around the flight data recorder.

23 (previously presented). An article of manufacture according to claim 22, wherein said hydroxide is a mixture of at least two of Lithium Hydroxide, Sodium Hydroxide, Potassium Hydroxide, Magnesium Hydroxide, Calcium Hydroxide, Beryllium Hydroxide, Aluminum Hydroxide, and Ammonium Hydroxide.

24 (previously presented). In combination:

(a) a heat absorbing control device that includes hydroxide in an amount to effect a level of heat absorption, said hydroxide having a formula of $M_x(OH)_y$, wherein "M" is selected from the group consisting of lithium, sodium, potassium, magnesium, calcium, beryllium, aluminum and ammonium, and wherein "x" and "y" are integers; and

(b) a flight data recorder that includes electronics that are sensitive to heat in thermal communication with said heat absorbing control device;

wherein said hydroxide is supported in relation to said heat sensitive device, and wherein said hydroxide effects said level of heat absorption that is sufficient to protect the electronics within the flight data recorder from damage at least in part based on an irreversible decomposition of said hydroxide and wherein irreversible decomposition of the hydroxide forms a thermal insulation oxide layer around the flight data recorder.

25 (canceled).

26 (original). A combination according to claim 24, wherein said heat absorbing control device includes a support means for supporting said hydroxide in relation to said heat sensitive device.

27 (previously presented). A combination according to claim 24, wherein said hydroxide is a mixture of at least two of Lithium Hydroxide, Sodium Hydroxide, Potassium Hydroxide, Magnesium Hydroxide, Calcium Hydroxide, Beryllium Hydroxide, Aluminum Hydroxide, and Ammonium Hydroxide.